



In the United States Patent and Trademark office

In Re application of: ) Date: March 13, 2006  
Carlos Daniel Jaffe ) Group art unit: 3732  
Serial number 10/632,505 ) Examiner: Candice Capri Stokes  
Filed: 08/04/2003 )  
For: All-in-one prophyl angle )

Honorable Commissioner of Patents and Trademarks

Dear Sir:

In response to the communication from the examiner, dated February 27, 2006.

The following is the communication from the examiner:

DETAILED ACTION

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made. Claims 1-3, 8-12, 17-21, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chipian et al (USPN 5,642,994). Chipian et al disclose a prophyl angle comprising a prophyl handpiece 105 with a driveshaft 140 with a first end with projections 210 and a second end attached to a prophyl cup 110 with a longitudinal axial direction, a rear end and a front end, an inside and outside. With further regard to Claim 1, Chipian et al disclose "the present invention is a combination of the headpiece 100 described in Figs. 2A, 2B, and 2C and fluid agent storage container 300 shown in a preferred embodiment in Figs. 3A and 3B. The storage container 300 is the simplest of all the storage containers to be disclosed herein. The container 300 is a flexible bladder, similar in function and form to a tube of toothpaste, except a dispensing orifice 310 is offset from the center of an end cap 320 (see Fig. 3B)" (col. 6, lines 35-42). "The orifice 310 is designed to fit snugly into the interference tapered container port 250 of the headpiece 100, and still allow a fluid agent to flow out of the container 300 and into the port 250" (col. 6, lines 47-50). Further Chipian et al teach "To dispense the fluid agent, the headpiece 100 is secured to the dental instrument handpiece 105. The dispensing orifice 310 of a fluid agent filled bladder 330 slides into the interference tapered container port" (col. 6, lines 62-65). "A fingertip or thumb presses from the sealed end 350 of the bladder 330, thereby forcing a fluid agent out of the bladder 330 and into the headpiece lumen 230, through the cup shaft 170 and into the prophyl cup 110" (col. 7, lines 2-5). Chipian et al fail to disclose or reasonably teach the prophyl cup 110 having an elastomeric material, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the prophyl cup of an elastomeric material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *in re Leshin*, 125 USPQ 416. Further, the drive shaft disclosed by Chipian et al is manually driven but it would have been obvious design choice to make it electrically driven. As to Claims 2, 11, and 20 Chipian et al teaches a prophyl cup having a front end with a skirt as shown in Fig. 1A and explain "Fig. 1A is a perspective view of the simple system that the inventors believe is probably the most similar in appearance to the present invention" (col. 4, lines 53-56). Regarding Claims 3, 12, and 21 Fig. 2A shows prophyl cup 110 having a narrowing annular retaining lip at the bottom portion of cup 110. With regards to Claims 7, 16, and 25 there is no further structural characteristics provided in these claims and the prophyl cup disclosed by Chipian et al is capable of performing in the same manner as the claimed invention. Referring to Claims 9, 18 and 27 Chipian et al disclose, "it may be advantageous to permanently embed the abrasive agent in the prophyl cup material as shown in Fig. 11" (col. 7, lines 40-42). Chipian et al also teaches the invention as stated in Claim 8, 10, 17 and 26 however they do not teach the claimed ranges. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a prophyl angle as stated in these claims with the specified ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art,

discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

### **Allowable Subject Matter**

Claims 4-6,13-15,22-24, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The above is a repeat of the first office action and has already been discussed.

### ***Response to Arguments***

**Applicant's arguments filed 12/05/05 have been fully considered but they are not persuasive.**

**Regarding claims 1,10 and 19 Applicant's representative submits, "Chipian teaches away from any use of a solid prophylactic polish and does not disclose a way of enclosing the prophylactic polish exclusively within a prophylactic cup" (see page 3, 6<sup>th</sup> paragraph).**

Please note in the first action response page 4, lines 3-10 "solid" and "contained exclusively within" are discussed. The claimed solid prophylactic polish is **solid**. Merriam-Webster defines **solid** as : " of uniformly close and coherent texture; not loose or spongy: compact; possessing or characterized by the properties of a solid: neither gaseous or liquid. In the present invention, this is the novelty. The paste is solid and does not flow as in Chipian. As will be noted in claim 5, the **solid** prophylactic paste must be dispensed with a spring; the solid prophylactic polish is not capable of flowing as in Chipian.

**To the contrary, the Examiner asserts that Chipian et al disclose, "a preferred embodiment of a fluid storage container is a flexible tube that is depressed by a finger or thumb to dispense a fluid such as a prophylactic paste or a polishing lubricant to the prophylactic cup"(see abstract).**

The above statement defines the prophylactic paste or polishing lubricant as being fluid. Fluid is not synonymous with solid. In Chipian the fluid storage container is external to the prophylactic cup, as opposed to contained within the cup. The above statement states the dispensing must be done with a finger or thumb. The finger or thumb requirement totally rules out the Chipian polish being stored within the

prophy cup because the prophy cup cannot be depressed due to the fact **the prophy cup is rapidly rotating** during a prophy (cleaning a patient's teeth).

**Further, the claims do not state that the polish is enclosed exclusively within a prophy cup.**

Line 8 of claim 1 states: "solid core prophy paste is contained longitudinally **within the inside** of the prophy cup." Line 9 of claim 10 states the same. Line 9 of claim 19 states the same. Nowhere within the specification and drawings of the present invention is the polish disclosed anywhere but within the prophy cup. I am sure we are in agreement that "within" or "inside" does not infer without or outside. It should not be necessary to claim what an invention is not.

**So the prior art is not required to meet this limitation.**

As discussed above, in Chipian the reservoir **cannot be within** the prophy cup. The prior art must meet this limitation.

**Inherently, the prophy polish disclosed by Applicant must be at least somewhat fluid in order for its molecules to move freely paste each other similar to that of a toothpaste.**

Absolutely not true. The paste in the present invention **cannot be like toothpaste**. There is no inherency. Your reference to "**prophy polish** disclosed by Applicant" is not descriptive of the invention. The invention claims "**solid core prophy paste**". A **crayon is similar** to the present invention. There is no requirement for a crayon to be somewhat fluid as there is no requirement for the solid core prophy paste to be somewhat fluid.

**Further Applicant's representative submits, "a manually driven prophy angle in**

dentistry has not existed since the invention of electrical motors" (see page 5, 5<sup>th</sup> paragraph).

The examiner had stated, in the first action, in reference to claim 1 : **"Further, the drive shaft disclosed by Chipian et al is manually driven but it would have been obvious to make it electrically driven."**

The point here was that Chipian **did not reveal a manually** driven prophy angle as the examiner had stated. The Chipian prophy angle is power driven.. The response clarified this point for the record. Further, claim 1 does not claim the power source, rather it explains the first driveshaft end is attached to a power source, electrical or power driven.

**By applicant's own admission, it would be obvious to make a manually driven motor, electrically driven instead.**

As discussed, Chipian did not disclose a manually driven prophy angle. The prior art did not disclose a manually driven motor (you mean manually driven prophy angle). The applicant did not admit something involving the prior art did not disclose.

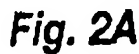
**As to claims 2, 11 and 20 it is submitted that "Chipian disclose the prophy cup 40 slightly flaring in its fill length; but, no definable skirt at the outer edge" (page 6, 1<sup>st</sup> paragraph).**

Claims 2, 11 and 20 state: "flares outwardly towards the front end, the front end is used for polishing teeth". Note in claim 1, lines 4-7 " dental prophy cup with a longitudinal axial direction, a rear end and a front end with a front polishing portion..". In Fig. 2A below the axial direction is vertical with the cup back end, with the annular tip, at the top mounted to the handpiece the front end facing downwards. The **front end** of the prophy cup is **always used for polishing** the teeth. Do not confuse the front end of the prophy angle with the front end of the prophy cup.

**. The limitations of the amended version of claims 2,11, and 20 are met by the Chipian et al reference**

As discussed above, the front end of the prophy cup is downwards away from the prophy handpiece. The front end of the prophy angle is on the left and should not be confused with the front end of the prophy cup. Chipian does not disclose the front end of the prophy cup flaring.

The claims do not state **an annular lip "within the inside of the prophy cup"**. The claims state: "an annular retaining lip defines the inside of the **front end** of the prophy cup". Chipian in Fig. 2A disclosed an **annular lip** on the **outside of the back end** of the prophy cup. Fig. 2A does not disclose the inside of the prophy cup. Chipian does not disclose the annular lip within the prophy cup.



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MPEP 706.07(a) states:

Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p). Where information is sub-

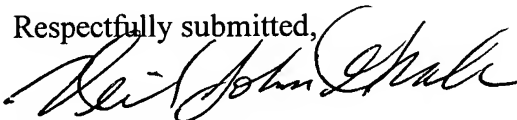
The only amendments to claims 1, 10 and 19 are "...a front end (prophy cup) with a front polishing portion." The examiner discusses the topics of **solid prophy polish** and **polish exclusively within a prophy cup, which** are not necessitated by the above amendment.

The amendments to claims 2, 11 and 20 did not change the description of a prophy cup with a flared front end. The discussion of the location of the flared end in the prophy cup in Chipian was not necessitated by the amendments.

Claims 3, 12 and 21 were not amended: therefore, did not necessitate the discussion of the annular lip.

The present action should not have been final.

MPEP 706.07(f) states further argument will be considered under certain instances. I don't believe, in the present response, new arguments have been presented, only a repeat of prior arguments in light of the examiner's present response.

Respectfully submitted,  


Neil John Graham

Reg. No. 51,179



AA JFW

PTO/SB/21 (09-04)  
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## TRANSMITTAL FORM

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7

Application Number 10/632,505

Filing Date 08/04/2003

First Named Inventor Carlos Daniel Jaffe

Art Unit 3732

Examiner Name Candice Capri Stokes

Attorney Docket Number 51,179

### ENCLOSURES (Check all that apply)

☐ Fee Transmittal Form

☐ Fee Attached

☒ Amendment/Reply

☒ After Final

☐ Affidavits/declaration(s)

☐ Extension of Time Request

☐ Express Abandonment Request

☐ Information Disclosure Statement

☐ Certified Copy of Priority Document(s)

☐ Reply to Missing Parts/  
Incomplete Application

☐ Reply to Missing Parts  
under 37 CFR 1.52 or 1.53

☐ Drawing(s)

☐ Licensing-related Papers

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### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name

Neil John Graham

Signature

Printed name

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03/13/2006

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51,179

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0/13/2006

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